

**DRAFT SCREENING SITE INVESTIGATION  
FOR THE  
BERS AND COMPANY/JOSEPH BERLINER COMPANY SITE  
ASHLAND STREET AND LEWIS STREET  
PHILADELPHIA, PENNSYLVANIA  
ECKEL SITE NUMBERS 50/309**

Prepared for

U.S. Environmental Protection Agency Region 3  
Hazardous Site Cleanup Division  
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Work Assignment No. 048-PAPA-03ZZ  
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## CONTENTS

<b><u>Section</u></b>	<b><u>Page</u></b>
1.0 INTRODUCTION .....	1
2.0 SITE BACKGROUND.....	2
3.0 SITE OBSERVATIONS.....	3
4.0 POTENTIAL TARGETS.....	4
5.0 FINDINGS AND RECOMMENDATIONS.....	5
REFERENCES .....	6

## APPENDIX

A	FIGURES
B	PHOTOGRAPHIC DOCUMENTATION

## **1.0 INTRODUCTION**

Under Remedial Action Contract (RAC) No. 68-S7-3002, Work Assignment No. 048-PAPA-03ZZ, U.S. Environmental Protection Agency (EPA) Region 3 tasked Tetra Tech, Inc. (Tt), to assist EPA Region 3 in the assessment of properties suspected to have been former lead smelter foundries. Tt subcontracted completion of this work assignment to Tetra Tech EM Inc. (Tetra Tech).

Former lead smelter sites nationwide were identified in an April 2001 article published in the American Journal of Public Health by Eckel, and others (Eckel study) (Reference [Ref.] 1). The majority of these lead smelters operated prior to 1964 and closed before the current environmental regulations were instituted. As part of the Eckel study, soil samples were collected from several of the identified former lead smelter properties. Results from the analysis of these soil samples indicated that concentrations of lead exceeded EPA's recommended screening level for lead in residential soils. The results of the Eckel study indicate that the air disposition of lead into soils from the former smelter operations may present an ongoing public health concern due to exposure of residential populations, especially children, located in the vicinity of these former lead smelters, to soils containing elevated concentrations of lead (Refs. 1, 2, and 3).

The Eckel study identified 77 properties that may have been formerly used as lead smelters within EPA Region 3 (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia). EPA Region 3 is currently investigating these 77 properties. The objective of EPA's investigation of these properties is to (1) determine the potential for lead-contaminated soil to be present at the former lead smelter site or nearby properties (2) identify any populations that may be at risk to exposure to this soil, and (3) determine if soil sampling is warranted at any of these sites or nearby properties.

The following activities were completed as part of the initial screening investigation of each of these former lead smelter sites: (1) verify the former lead smelter address listed in the Eckel

study through historical Sanborn fire insurance maps, tax parcel information, and/or contacting local agencies, (2) determine if the site is listed in EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database, (3) determine through census information and existing maps the number of schools, daycare centers or recreational parks that exist near the former lead smelter site, (4) determine the population residing within a 4-mile radius of the site, (5) conduct a windshield reconnaissance of the site and surrounding area to document the current land use, identify any exposed soil and verify the existence of any schools, daycare centers or parks in the immediate area, and (6) review all information acquired to determine if the collection and analysis of soil samples is warranted at the site or at any nearby property.

This report summarizes the findings of the tasks outlined above for the former lead smelter known as the Bers and Company and the Joseph Berliner Company site located at Ashland and Lewis Streets, Philadelphia, Pennsylvania, 19124. Each former smelter property was given a number in Eckel's study. The Eckel study number for Bers and Company is 50 and for Joseph Berliner Company is 309 (Ref. 1). Because both sites were identified as located at the same intersection (Ashland and Lewis Streets), they have been combined for assessment.

## **2.0 SITE LOCATION**

The address cited for the former Bers and Company and the Joseph Berliner Company facilities of Ashland and Lewis Streets, Philadelphia, Pennsylvania, 19124 no longer exists. Ashland Street currently ends at Adams Avenue north of Interstate 95 and Lewis Street currently ends at Richmond Street south of Interstate 95. The geographic coordinates of the intersection of Ashland Street and Adams Avenue are 40.003600° north latitude and 75.086400° west longitude and the geographic coordinates of the intersection of Lewis Street and Richmond Street are 39.99317° north latitude and 75.08172° west longitude on the Frankford, Pennsylvania-New Jersey Quadrangle, 7.5 minute series, United States Geological Survey topographic map (see Appendix A, Figure 1). The site is not currently listed in EPA's CERCLIS database (Ref. 4). An aerial photograph of the vicinity of the former lead smelter site has been included in

Appendix A, Figure 2. This aerial photograph reveals the exposed soils and any identified areas of potential concern such as schools, daycare centers, or parks located within a half-mile radius of the site.

### **3.0 SITE OBSERVATIONS**

On December 16, 2005, Tetra Tech completed a non-sampling windshield reconnaissance of the Bers and Company and the Joseph Berliner Company site and surrounding area. A photographic record of the current site conditions is included in Appendix B. Figure 3, shows the current layout of the site and surrounding area as observed during Tetra Tech's site reconnaissance. The following observations were recorded:

- The exact location of the former lead smelters could not be identified. Ashland Street and Lewis Street no longer intersect. Ashland Street currently ends at Adams Avenue, north of Interstate 95. Lewis Street currently ends at Richmond Street, south of Interstate 95. The intersection of Ashland Street and Adams Avenue and the intersection of Lewis Street and Richmond Street are both dominated by industrial properties.
- The intersection of Ashland Street and Adams Avenue is surrounded by industrial properties and parking lots in all directions. Frankford Creek, a tributary to the Delaware River, is located approximately 0.25 miles southwest of the intersection.
- Industrial properties are located in the southwest side of Lewis Street from Richmond Street to the Delaware River. Interstate 95 is located just north of the intersection of Lewis Street and Richmond Street. Railroad tracks and Frankford Creek run northwest to southeast parallel to Lewis Street on the northeast side of the street.
- Exposed soils in significant quantity were not identified in the nearby vicinity of the intersection of Ashland Street and Adams Avenue. Strips of exposed soil were observed

running along the railroad tracks and between the railroad tracks and Frankford Creek in the vicinity of the intersection of Lewis Street and Richmond Street.

- No schools, parks, or daycare facilities, or residences were identified in the immediate vicinity of the site.

#### **4.0 POTENTIAL TARGETS**

Potential targets identified that may be exposed to lead-contaminated soils remaining in the vicinity of the former Bers and Company and the Joseph Berliner Company site include any workers that may be employed at or in the nearby vicinity of both the intersections of Ashland Street and Adams Avenue and Lewis Street and Richmond Street. The residential population within a 4-mile radius of the site is summarized in the table below (Ref. 5).

**Population Within a Four-mile Radius of the Site**

<b>Distance Ring (miles)</b>	<b>Population (number of persons)</b>
0.0 to 0.25	615
0.25 to 0.5	4,594
0.5 to 1.0	26,818
1.0 to 2.0	95,831
2.0 to 3.0	180,381
3.0 to 4.0	243,034

Source: U.S. Department of Commerce. Landview V Environmental Mapping Software based on the Bureau of Census 2000 Population Data. December 15, 2005.

No parks, schools, daycare centers, or residences have been identified in the immediate vicinity of either possible site location. One school, the Mata Dolorosa School, is located approximately one-third mile northwest of the intersection of Ashland Street and Adams Avenue. No schools were identified within one-half mile of the intersection of Lewis Street and Richmond Street. No parks were identified within one-half mile of the intersection of Ashland Street and Adams Avenue. Baseball fields are located approximately one-quarter mile east of the intersection of

Lewis Street and Richmond Street. The nearest residences to the intersection of Ashland Street and Adams Avenue are located approximately one-quarter mile east of the intersection. The nearest residences to the intersection of Lewis Street and Richmond Street are located less than 1,000 feet to the southwest of the intersection along Richmond Street.

## **5.0 FINDINGS AND RECOMMENDATIONS**

The exact location of the former lead smelters could not be identified. The location of Ashland and Lewis Street provided in the Eckel report no longer exists. Ashland Street and Lewis Street are approximately three-quarter miles apart. The locations of both streets are characterized by industrial development. No significant quantities of exposed soils or potential targets associated with parks, schools, daycare facilities or residences were observed in the vicinity of either location. Potential targets identified in the areas are limited to workers. Due to the lack of potential targets associated with either of the possible locations for these sites, the collection and analysis of soil samples is not recommended.

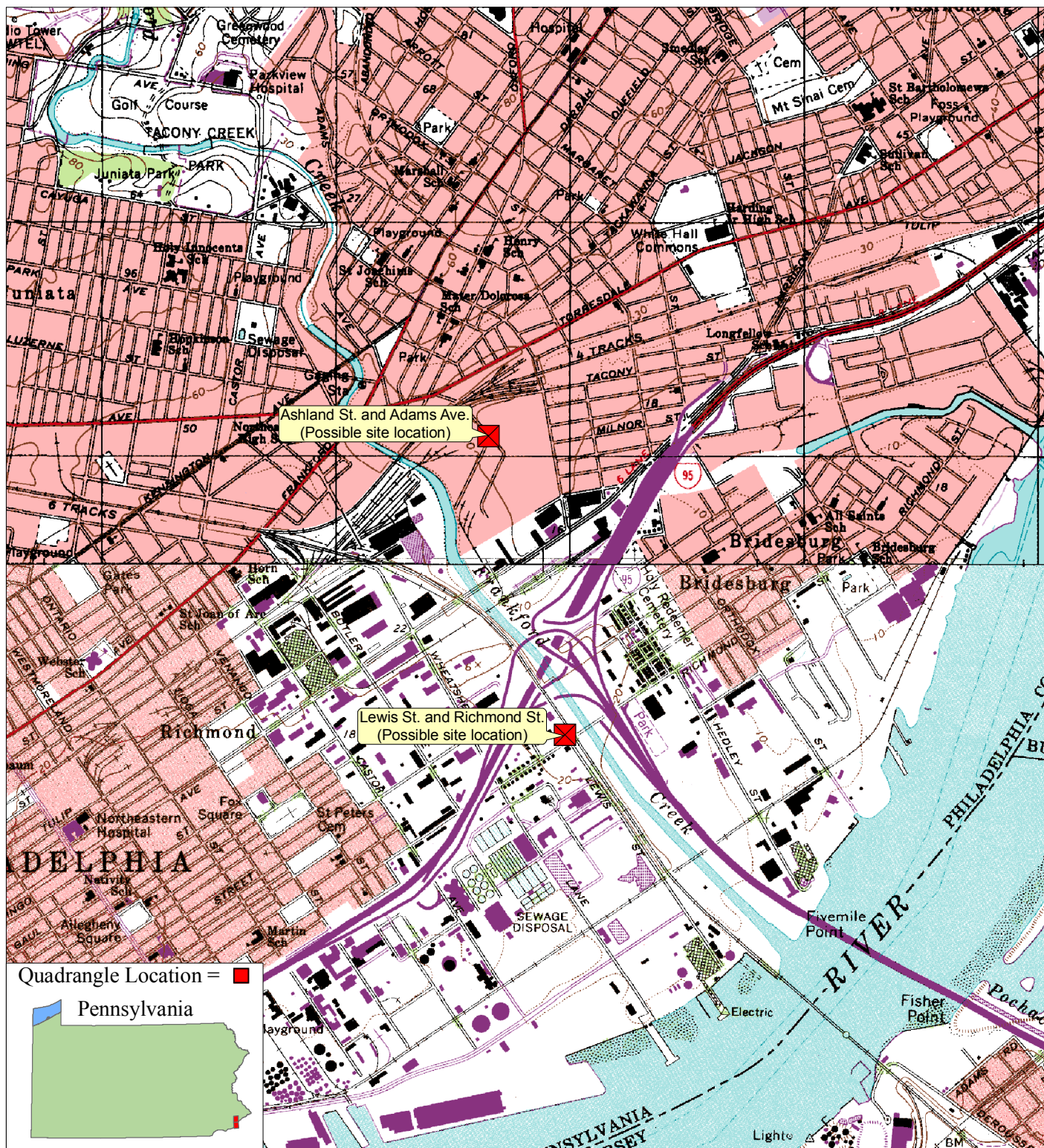
## REFERENCES

1. Eckel, W.P., Rabinowitz, M.B., Foster, G.D. American Journal of Public Health. "Discovering Unrecognized Lead-Smelting Sites by Historical Methods". April 2001.
2. Pennsylvania Department of Health. Suspected Former Lead Smelter Sites: A Potential Risk Factor for Childhood Lead Poisoning. August 2004.
3. U.S. Environmental Protection Agency (EPA). Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities. OSWER Directive 9355.4-12. July 14, 1994.
4. U.S. EPA. Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) database. On-Line Address: <http://cfpub.epa.gov/supercpad/cursites/srchsites.cfm>
5. U.S. Census Bureau. State and County Quick Facts. Accessed On-Line on December 15, 2005. On-Line Address: [quickfacts.census.gov/qfd/states/42.html](http://quickfacts.census.gov/qfd/states/42.html).

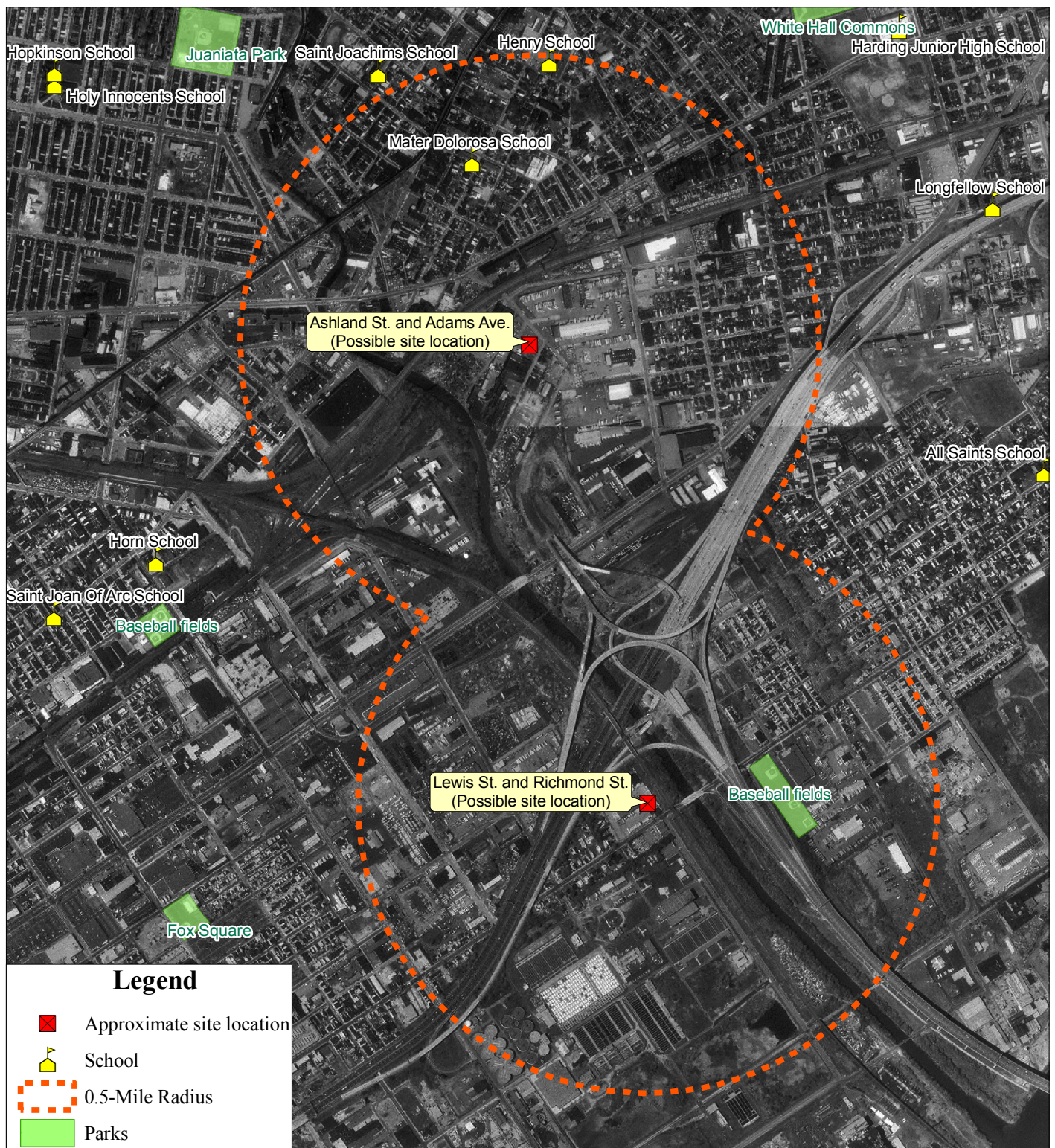


## **Appendix A**

### **Figures**







0 500 1,000 1,500  
Feet  
Scale in Feet

Bers & Co./Joseph Berliner Co.  
Ashland and Lewis Streets  
Philadelphia, Pennsylvania  
Eckel Site Nos. 50 and 309

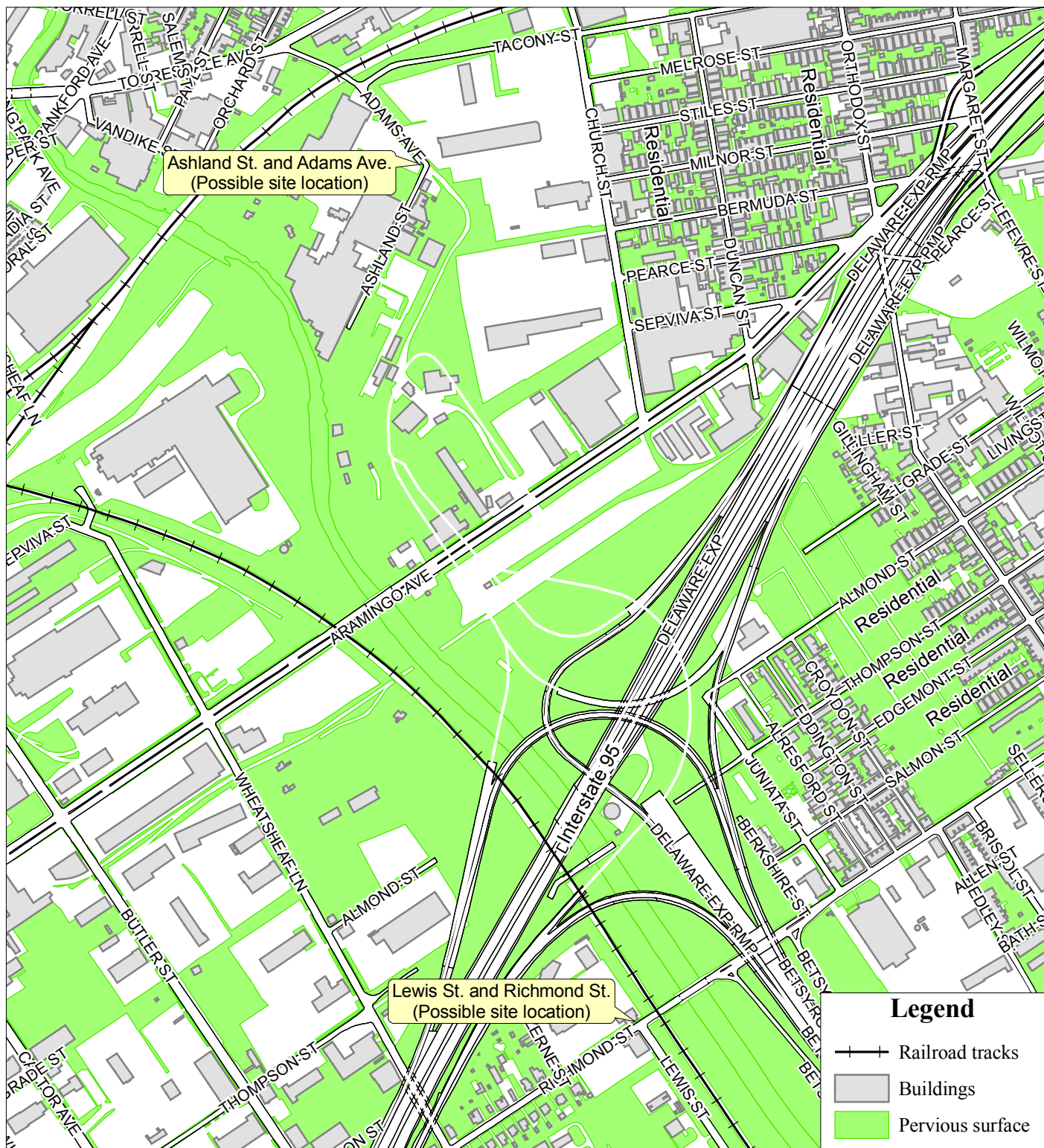


**Figure 2**  
Aerial Photograph

Source: Modified from Digital Orthophoto (DOQQ) MrSID mosaic for Camden Quadrangle (NAPP III, 1997-2001) Frankford Quadrangle (NAPP III, 1997-2001)

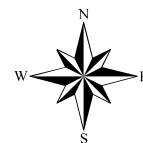






0 500 1,000  
Feet  
Scale in Feet

Bers & Co./Joseph Berliner Co.  
Ashland and Lewis Streets  
Philadelphia, Pennsylvania  
Eckel Site Nos. 50 and 309



**Figure 3**  
Site Layout Map

Source: Modified from Philadelphia City Planning Commission (PCPC) Department - GIS Division, 2006.



**Appendix B**  
**Photographic Documentation**



## *Photographic Documentation*

**Site Name:** Bers and Company/Joseph Berliner Company  
– Eckel Numbers 50/309

**Location:** Ashland Street and Lewis Street, Philadelphia,  
Pennsylvania

**Prepared by:** Tetra Tech EM Inc.

**Photographer:** [REDACTED]

### **Photograph No. 1**

**Photograph Date:**  
September 7, 2005

**Description:** View of Adams  
Avenue facing southwest.



### **Photograph No. 2**

**Photograph Date:**  
September 7, 2005

**Description:** View of Adams  
Avenue facing southeast.

